# *Grande Prairie County West*

*Local*
*Integrated Resource Plan*

Alberta
FORESTRY, LANDS
AND WILDLIFE

# GRANDE PRAIRIE COUNTY WEST

# LOCAL INTEGRATED RESOURCE PLAN

Approved by the Minister
of Forestry, Lands and Wildlife on March 21, 1991

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## PREFACE

This planning document was prepared by government agencies and public consultants in recognition of the need for improved management of Alberta's lands and resources. It applies only to public lands within the Grande Prairie County West planning area, not to private or federal lands.

The plan presents the Government of Alberta's resource management policy for public lands and resources within the area. It is intended to be a guide for resource managers, industry and the public with responsibilities or interests in the area, rather than a regulatory mechanism. Resource potentials and opportunities for development are identified with a view to assisting in the economic progress of Alberta. The plan is sufficiently flexible so that all future proposals for land use and development may be considered. No legitimate proposals will be categorically rejected. Energy resource decisions are subject to the application of regulatory approval processes under the jurisdiction of the Minister of Energy. This plan may influence regulatory decisions, but will not result in the categorical approval or rejection of energy proposals.

The provincial government is committed to serving Albertans. Should a proposal not be in keeping with the provisions of the plan, staff will work with the proponent to explore alternative means for accommodating the proposal in a more appropriate location, either in this planning area or on other public lands. The rejection of any proposal will be done only in writing by the Minister of Forestry, Lands and Wildlife or his designate.

A detailed outline for implementation will be provided for this local plan in order to identify the necessary implementation actions and roles. This implementation outline will also provide for the periodic review of the plan so that it may accommodate changing needs and situations. Wherever possible, the private sector will be provided with the opportunity to be actively involved in the operational delivery of the plan.

Implementation is subject to the normal budgetary approval process. In establishing overall priorities, opportunities in other planning areas and areas currently outside the planning process will be considered.

While the plan identifies resource potentials and opportunities, the realization of these may require the dedication of major amounts of public funds. The plan will be used on the understanding that any actions required for implementation will be undertaken only as budgetary approvals are given in the normal way. The private sector will be given the first opportunity to provide any development required.

This plan has no legal status and is subject to revisions or review at the discretion of the Minister of Forestry, Lands and Wildlife.

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# 1.0 INTRODUCTION

## 1.1 Purpose of Plan

The Grande Prairie County West Local Integrated Resource Plan identifies the long-term management direction for the provincial public lands and resources of this planning area. The plan identifies those lands suitable for agricultural uses, timber production, wildlife and fisheries habitat, as well as other land uses. Agricultural uses include improved grazing, and forage or till crop production. The plan also identifies methods that will assist in maintaining compatibility in the management of this multiple use area.

The plan determines the long-term agricultural, timber, wildlife and fisheries interests in the area. In order to establish the timber supply available to local residents, the land suitable for sustained yield of coniferous and deciduous timber had to be identified.

All timber resources on provincial public lands will be managed, including timber on grazing dispositions in the Green Area and White Area.

## 1.2 Planning Area

### Location

The Grande Prairie County West planning area is located west of the city of Grande Prairie (Figure 1). The smaller communities of Beaverlodge, Hythe, Demmitt, Lymburn, Goodfare and Elmworth are found along the planning area's eastern boundary. The Alberta-British Columbia border forms the western boundary. The total land area encompasses approximately 930 $km^2$ (360 sq. mi.).

### Resource Summary

This planning area contains both renewable and nonrenewable resources. Although some of the land is suitable for till cropping, most is better suited for improved and unimproved grazing. In addition, the planning area has the capability to supply a significant volume of deciduous timber and a lesser amount of coniferous timber. Development of this timber resource can help diversify the local economy.

The wildlife resource has both commercial (trapping and guiding) and recreational (consumptive and nonconsumptive) significance. Important habitat for moose and deer exists within the area. The Grande Prairie region contains 43 percent of the Canadian breeding population of trumpeter swans, and the planning area supports a significant portion of this population. Trumpeter swans, classed as an endangered species in the General Wildlife Regulations of the Wildlife Act, nest in lakes and ponds throughout the planning area. Protection of these nesting sites is essential, since disturbance of swans in their nesting habitat may result in nest abandonment. Wetlands within the planning area are also important for other waterfowl.

The drainage systems of the Red Willow and Beaverlodge rivers provide important recreational fisheries. These water systems support a variety of sport fish including arctic grayling, walleye, bull trout and northern pike. In addition, the Beaverlodge River provides the water supply for the town of Beaverlodge.

Extensive recreational opportunities occurring in the area include hunting, hiking, fishing, picnicking, horseback riding, off-highway vehicle (OHV) use and snowmobiling. Most of the users are either local residents or from the Grande Prairie region.

The planning area is in the Deep Basin natural gas area, which has been extensively explored and in which there is presently an important production of natural gas and some

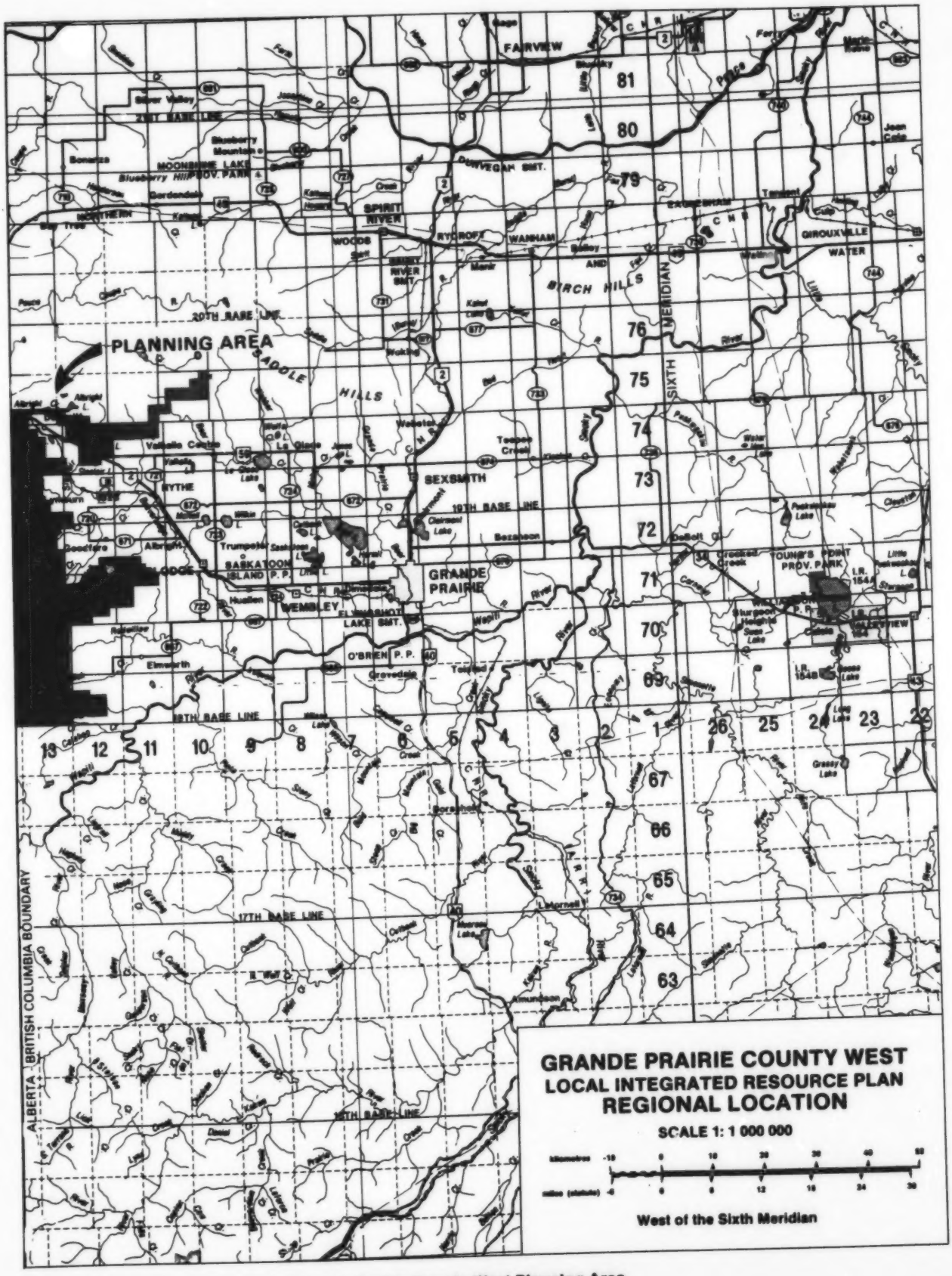


**Figure 1: Regional Location of the Grande Prairie County West Planning Area.**

petroleum. The intensity of future development is dependent on national and international energy demands. The aggregate resources of this area are also important locally.

Major public roads include Highway 2, Secondary Highway 671 (locally known as the Goodfare Road), and a local roadway known as the Monkman Pass Road. Access management may be required because of the cumulative negative effects on wildlife and cattle operations from access development.

In response to the grazing and municipal interests, the plan recommends that some consideration be given to having the big game hunting season follow the grazing season.

## 1.3 Planning Process and Participants

### Process

The purpose of the integrated resource planning process is to provide direction for the management of resources within the Grande Prairie County West planning area. The process attempts to integrate government resource planning initiatives by establishing resource management objectives and guidelines, and by resolving identified conflicts or concerns.

The planning process for development of integrated resource plans consists of a series of interrelated action steps. The steps are sequential with the exception of the data gathering and analysis step, which can occur throughout the process. The process is also flexible in that the sequence of events may be interrupted to return to a previous step, if required.

Preparation and approval of the terms of reference is a major element of the plan initiation. An interdepartmental planning team prepared a draft terms of reference that was reviewed by the public in March 1987. Public comments were summarized into a report that was distributed to everyone involved in the review. These comments were also considered by the planning team in preparing the draft plan.

Preparation of the terms of reference was followed by the initiation of data collection and analysis, an ongoing process throughout development of the plan. The resource management agencies collected and analyzed data in the categories of present use, demand, potential and capability for a wide variety of resources. This information was used to develop resource management objectives and guidelines, and to resolve identified conflicts. The next step was to develop the draft plan.

Public input was a part of the draft plan preparation. Public input from two public reviews of the draft plan was considered in preparing the Grande Prairie County West plan. The first public reviews were in August and September of 1989. Eleven meetings were held along with an open house and information exchange in Beaverlodge, and 65 submissions were received. A second public review of the revised draft plan was provided based on the public's request for another opportunity to review the draft plan before its approval. A round table meeting, an open house and an information exchange session took place in March 1990 in Beaverlodge. A total of 40 submissions was received. Overall, the public interest and input for this plan have been good.

The draft plan was prepared with the best available data and included recognition of public interests.

### Participants

A planning team approach is used in the development of integrated resource plans. The planning team consists of representatives from government agencies that have major responsibilities or interests in resource management of the Grande Prairie County West planning area, plus a team coordinator who is responsible for the overall coordination of plan development.

The Grande Prairie County West planning team contains representatives from the following provincial government agencies:

1. Public Lands Division, Forestry, Lands and Wildlife;
2. Alberta Forest Service, Forestry, Lands and Wildlife; and
3. Fish and Wildlife Division, Forestry, Lands and Wildlife.

The Resource Information Branch of the Land Information Services Division provided an integrated resource inventory of the planning area. The Resource Planning Branch of Forestry, Lands and Wildlife coordinated preparation of this plan.

Designated consultants provided input to the planning team at key stages of the planning process. Consultants included representatives from Alberta government agencies and a federal agency.

Representatives of the following government agencies were consultants to the planning team.

1. Alberta Agriculture
2. Mineral Resources Division, Alberta Energy
3. Alberta Environment
4. Alberta Tourism
5. Alberta Transportation and Utilities
6. Alberta Culture and Multiculturalism
7. Agriculture Canada
8. Energy Resources Conservation Board, Alberta

Other consultants included representatives from a regional planning commission and local governments.

The Member of the Legislative Assembly for Grande Prairie was kept informed during the plan's development.

# 2.0 RESOURCE MANAGEMENT DIRECTION

## 2.1 Policy Content

### Legislation and Associated Directives

Various provincial government agencies administer pertinent legislation and the associated regulations to manage resources throughout Alberta, including those within the Grande Prairie County West planning area. In addition to legislation and regulations, there are also governmental directives, such as orders-in-council and ministerial orders, that affect resource management activities. This section does not attempt to list all of the applicable government directives; rather, it highlights those that are most applicable for the planning area.

Provincial public lands are administered either as Green Area or White Area. The Green Area was established by order-in-council in 1948, and contains lands not available for settlement or agricultural development other than grazing. Public lands in this area are managed primarily for forest production, watershed protection, recreation and other uses. The White Area includes public land that may be suitable for agricultural development and is not required for other uses such as conservation, recreation, or fish and wildlife habitat.

The Forests Act, c. F-16, Section 7 provides for the management of the timber resource on all provincial public lands. This includes timber on grazing dispositions both in the Green Area and White Area.

### Resource Management and Planning

The Alberta government is responsible for managing the provincial resource base, and wants to make optimal use of all natural resources in order to provide maximum benefits for Albertans, now and in the future. The government is committed to an integrated approach to resource management, which recognizes that the management and use of one resource may affect the management and use of another resource. Integrated resource management attempts to reduce or resolve any conflicts and enhance or promote positive interactions between resource management and land use activities. Cooperation and coordination are fundamental aspects of integrated resource management.

Integrated resource planning is a decision-making process used to achieve integrated resource management. In integrated resource planning, the resource planning initiatives of various government agencies are compared and subsequently confirmed or modified to produce a product acceptable to all involved agencies. Public involvement in planning ensures that public interests are considered. An integrated resource plan contains resource management objectives and a pertinent course of action, that together provide direction for field-level resource management decisions. The Grande Prairie County West Local Integrated Resource Plan was developed in the context of integrated resource management and planning. It applies to provincial public lands and not to private or federal land.

## 2.2 Primary Intent of Plan

The balance of this section consists of a statement of intent for resource management within the planning area, plus a set of broad resource objectives and guidelines that apply to the entire planning area. A resource summary is also provided for each resource sector.

The primary intent for resource management within the Grande Prairie County West planning area is as follows:

> To achieve long-term and sustained social and economic benefits by providing for the optimal use of range, timber, wildlife and other resources,

while maintaining the integrity of the natural environment.

The Grande Prairie County West plan has been developed within the scope of the primary intent and broad resource management objectives developed for the planning area. These objectives provide standards for future resource management. Broad resource management guidelines follow the resource management objectives. The objectives describe what is to be achieved while the guidelines state how the objectives will be achieved.

The following set of broad resource management objectives and guidelines apply to the entire planning area. They are not presented in order of importance.

## 2.3 Agriculture and Range

Agriculture is important to the rural economy of this area. The planning area has a limited amount of land available or suitable for till cropping. This is because the better lands have already been developed for agricultural use.

Most farmers run a mixed farming operation with an emphasis on cow/calf production. Livestock production occurs on unimproved and improved grazing lands. Forage is harvested for winter feeding. The better soils at lower elevations are suitable for till cropping or feed and forage crop production. The moderate temperatures in summer and adequate rainfall promote good crop production with some risk of frost damage to cereal crops. The area's higher elevation, in comparison to the rest of area, brings an associated frost risk, which is a factor limiting cereal crop production. The variable climatic conditions make cereal crop production marginal over the long term. In some areas, excessively stony soil conditions limit agricultural capability.

Presently, the planning area provides grazing opportunities to neighbouring farming operations. The potential to provide additional grazing relates more to range improvement on existing grazing dispositions than to issuing new dispositions. Most of the planning area already provides grazing opportunities.

Multiple land use interests are recognized in the management of public lands. When considering development or use of public land, concerns to be considered include soil and water conservation as well as other public resource interests (e.g., agriculture, wildlife, fisheries, timber and recreation). It is recognized in the Public Lands Act, Public Lands Grazing Lease Regulations, Section 20(1) that logging on grazing dispositions may occur.

### Objectives

1. To make suitable agricultural lands available for sale or lease.

2. To maintain or improve the range condition, and forage production and use within grazing dispositions.

3. To provide for unimproved grazing where adequate forage is available, and where compatible with other values and uses (e.g., timber, fish and wildlife, water and watershed).

### Guidelines

1. The release of saleable lands to the agricultural community will be based on local demand, present dispositions, capability and access, with consideration of other values. Non-saleable lands may be made available for disposition, in consideration of other values.

2. Improvements within grazing dispositions will be based on local demands, capability for improvement and compatibility with other resource values and uses.

3. The forage resources will be managed according to range management plans and policies. These plans will be consistent with management direction

identified by this local integrated resource plan.

4. The existing grazing dispositions will continue to be recognized as grazing commitments that are renewable.

## 2.4 Timber

At present, the planning area's timber resource is available for local residents through short-term timber dispositions. In addition to coniferous timber, there is a good supply of deciduous timber. With this timber becoming marketable within the foreseeable future, the local economy could benefit through diversification. The extent of the benefit depends on the size of the permanent forest land base. The coniferous and deciduous timber resource will be managed for the use and benefit of local residents.

Public lands regenerated to coniferous timber will not be cleared for agricultural development. Reforestation can be carried out only on permanent forest lands, since a minimum of 80 years is required to produce a coniferous timber crop with 60 years for a deciduous crop. Liquidation harvest will take place on lands identified for agricultural development. This can provide short-term benefits for local residents and also ensure resource use.

### Objectives

1. To maximize the sustained yield of deciduous and coniferous timber available for use by local industries and residents on lands designated for sustained-yield timber production.

2. To ensure the liquidation or salvage of merchantable timber on lands required for agricultural use or industrial development where a market for that timber exists.

3. To protect timber resources from damage or destruction by fire, insects or disease.

4. To ensure optimal economic use of wood fibre resources on lands designated for timber production.

### Guidelines

1. Deciduous and coniferous timber stands harvested within areas designated for sustained-yield timber management will be reforested in accordance with established policy and regulations. Those lands designated for sustained yield will be identified and administered as a Forest Management Unit.

2. Where feasible, timber salvage operations will be coordinated with other land use activities to ensure the timber is used.

3. The emphasis on sustained-yield timber management will require a higher level of forest fire protection and higher associated costs. The entire planning area and any additional area required as a protection buffer will be placed in the Forest Protection Area for the purpose of protecting timber resources from fire, insects or disease. Fire permits will be obtained from the Alberta Forest Service.

4. Timber harvesting will be conducted under existing Timber Harvest Planning and Operating Ground Rules for the timber disposition holders. Timber harvesting plans will be modified where necessary to protect watershed values and protect or enhance important wildlife habitat. The development of the timber harvesting plans will be coordinated with the present agricultural use and interests.

The public will be consulted regarding preparation of the forest management plan which addresses forest management for the total area. On grazing lease lands, a separate and more detailed logging plan will be

prepared in consultation with the lessee. This plan will address harvest sequencing and timing of operation, and the cleanup conditions following harvesting.

5. Forest management planning will be consistent with the management direction identified by this local integrated resource plan.

## 2.5 Wildlife

The planning area's good wildlife habitat provides opportunities for consumptive and nonconsumptive wildlife uses. This area contains a diversity of wildlife species and habitat types. Large mammals found within the planning area include elk, moose, mule deer, white-tailed deer, black and grizzly bear. The area supports a range of furbearers including lynx, wolf, coyote, marten, fisher, beaver, muskrat and red squirrel. The trumpeter swan, an endangered species, nest here. Other waterfowl also nest and stage in the area. Ducks Unlimited has waterfowl habitat improvement projects on many of the water bodies within the planning area.

The area's habitat consists of deciduous and mixedwood cover with wetlands, watercourses and shallow lakes. The mosaic of forest cover and riparian areas provides good moose habitat. The wetlands and shallow lakes are important for production of trumpeter swans, other waterfowl and furbearers.

The major consumptive uses of wildlife in the planning area are trapping of furbearers and hunting of elk, moose, deer, bear and waterfowl by resident and non-resident hunters. Good opportunities for nonconsumptive uses are also available. In particular, trumpeter swan viewing is of special interest to the public.

### Objectives

1. To maintain a diversity of wildlife species, and to increase numbers where projected public demand (for both consumptive and nonconsumptive uses) exceeds current populations.

2. To maintain and/or increase the quality and quantity of suitable aquatic and terrestrial habitat required to support wildlife populations at optimal densities.

3. To maximize the number of successfully nesting pairs of trumpeter swans.

4. To maintain a mosaic of habitat types to encourage a viable, abundant and diverse population of key wildlife species (i.e., elk, moose, deer), upland game birds and waterfowl.

5. To minimize the impacts of land use practices and resource developments on the trapping industry.

### Guidelines

1. A mosaic of habitat types will be maintained through the Fish and Wildlife Division's input into logging plans, range improvement programs, habitat enhancement programs, as well as other industrial and agricultural dispositions.

   The Fish and Wildlife Division will be involved in the referral process for timber planning in both the Green and White areas.

2. The trappers will be notified before posting lands for sale or lease. Their concerns will be considered in the planning stage of range improvement.

3. All known trumpeter swan habitat will be managed by the following measures:

   (a) the placement of a protective reservation on those lands surrounding the water body (in some cases the reservations will not allow grazing);

(b) the retention, as public land, of an 800 m buffer around lakes and/or ponds;

(c) the evaluation of logging proposals on a site-specific basis. Logging will be managed within the 500 m buffer (from the high-water mark) of the water body. Generally, no logging will occur within 200 m of the high-water mark. However, some management within this 200 m buffer may be required, depending on the height and density of the buffer. In the remaining 300 m, logging may be allowed, providing the design and timing mitigate impacts. Timber management planning within the 500 m buffer will be done in consultation with the Fish and Wildlife Division. Planning for insect, disease and fire control activities will be done in consultation with the Fish and Wildlife Division;

(d) the evaluation of development proposals other than logging (e.g., oil and gas, recreation, range improvement, new and reposted agricultural dispositions) on a site-specific basis. Up to a 500 m buffer (from the high-water mark of the water body) may be required depending on density and height of the buffer, type of development and importance of the wetland;

(e) the implementation of timing constraints, where necessary, upon activities in proximity to the wetlands, in order to avoid disturbance during key periods (e.g., nesting);

(f) the periodic identification of specific parcels of private land that may be suitable for purchase by the Crown because of important habitat concerns; and

(g) the management of suitable lakes and water bodies for trumpeter swan production rather than for fisheries production.

4. Other waterfowl (i.e., ducks and geese) management will include the following efforts:

(a) the placement of a protective reservation on waterfowl-producing habitat. This may restrict agricultural uses on new and reposted (i.e., not previously identified and previously posted) lands. Domestic grazing may not be permitted along some waterfowl-producing lakeshores;

(b) the cooperation with the grazing disposition holders through the Buck for Wildlife Program or the range improvement program, to address problems on the existing grazing dispositions related to the need for grazing restrictions on certain areas during the waterfowl nesting period (e.g., no grazing until after July 15);

(c) the assessment of wetlands to determine their potential for waterfowl habitat enhancement;

(d) the retention of a minimum 100 m buffer on new or reposted grazing dispositions on waterfowl-producing habitat. Fenced corridors to watering sites will be required; and

(e) the evaluation on a site-specific basis of development proposals (e.g., logging, oil and gas, recreation, range improvement) in proximity to important wetlands. A minimum 100 m buffer may be required in most cases. On existing grazing leases, this will be done in cooperation and consultation with the grazing disposition holder.

5. Livestock producers may be compensated for wildlife predation through the available programs (e.g., Livestock Predator and Indemnity Program) as required.

6. Problem wildlife situations will be resolved through animal removal or control, where appropriate, under the Nuisance Wildlife and Beaver Flood Control Program.

## 2.6 Fisheries

The planning area's fisheries resource is important to residents of the Grande Prairie region. The Red Willow and Beaverlodge river systems are important habitat for arctic grayling, walleye, bull trout and northern pike.

The fisheries potential of most lakes in the planning area is limited by insufficient water depth, low oxygen levels and excessive plant life. The opportunities for fisheries enhancement are limited.

Impacts on fish habitat within the planning area are the potential consequences of intensified land use practices. These include land clearing, which can result in excessive stream siltation that affects water quality, in fast runoffs and low flows, and in nutrient loading. Although beaver dams can provide valuable pool and overwintering habitat, they can become barriers to upstream fish movement. Roadway crossings on the watercourses can also have an impact on the fisheries resource (i.e., habitat degradation from obstructions and siltation), as well as increase the sportfishing pressure with increased roadway access.

### Objectives

1. To optimize the abundance, distribution, diversity and recreational use opportunities for the fisheries resource for present and future generations.

2. To identify, maintain and enhance native fish populations in rivers and streams.

3. To identify, maintain and enhance native fish populations in lakes where not in conflict with trumpeter swan production.

4. To protect fish habitat from the degradation that would arise from conflicting resource uses.

5. To prevent obstructions to fish passage along watercourses.

6. To retain angling access on watercourses important as recreational fisheries.

### Guidelines

1. The fisheries resource of the Red Willow and Beaverlodge drainages will be managed to maintain or increase the fish population. This will include application of the following specific guidelines:

   (a) vegetative buffers will remain in public ownership or be maintained through ecological corridor agreements within these drainages;

   (b) watercourses with spawning habitat will receive a high degree of protection when development occurs;

   (c) domestic livestock grazing will be limited where required along these watercourses (e.g., through streambank fencing). On existing grazing dispositions, streambank fencing will be conducted in cooperation with the disposition holders; and

   (d) fish passages will be ensured for roadway developments crossing watercourses.

2. Legal public access to fisheries will be maintained.

3. New grazing leases may be required to exclude, through fencing, important fish-producing streams.

## 2.7 Water and Watershed

The water resources of the province are generally managed on the principle of multiple use. The management of other resources that interact with water affects the management and use of water.

The Red Willow and Beaverlodge rivers flow through the planning area. The Red Willow is fast flowing and has a defined river valley, while the Beaverlodge River is slow flowing and rather sluggish. The water quality of both rivers is important to all users (e.g., municipal, industrial, agricultural, recreational). The planning area's water resource and watershed serves local demand for agricultural, industrial and recreational users. Furthermore, the streams are important fish habitat. However, the lakes and ponds are mainly shallow and more suited for waterfowl production.

Resource development activities (i.e., timber harvesting, range improvement, agricultural developments, oil and gas activities) can potentially affect the water quality and runoff. They can also cause soil erosion, to the detriment of water quality.

### Objectives

1. To manage land use activities to maintain or improve the quality and quantity of water originating in the basin.

2. To maintain the long-term integrity of natural watercourses and ensure protection of the watersheds.

3. To minimize erosion and soil losses resulting from land use activities.

### Guidelines

1. Appropriate measures will be applied as required to ensure that resource management activities and other land use practices do not significantly affect water supplies and quality in a detrimental manner.

2. Resource developments, land use activities and operations must be carried out or located in areas that will minimize potential soil erosion. Mitigative measures must be designed and approved before any disposition can be issued.

3. Buffers and natural vegetative cover will be retained along significant watercourses.

4. Important watershed areas will remain in public ownership. Important muskegs and wetlands will be protected from development (including drainage) to maintain water quality, flow regime and habitat.

5. Resource developments will be designed to have no significant, negative effect on the water quality and flow regime.

## 2.8 Recreation

The Grande Prairie County West planning area provides for extensive recreation activities such as hunting, fishing, trumpeter swan viewing, hiking, OHV use and snowmobiling. Most recreation users are either local residents or from the Grande Prairie region.

Three recreation leases, two candidate natural areas, an Alberta Transportation and Utilities campground and a Junior Forest Warden cabin site are within the planning area. Natural areas are set aside to protect areas of sensitive or scenic public lands from disturbance, and to ensure the availability of

lands in a natural state for recreation and education, and as a natural heritage resource.

Objectives

1. To provide a range of extensive recreation activities such as hiking, trail riding, hunting, fishing, wildlife viewing, OHV use and snowmobiling.

2. To maintain the recreation capability of areas identified as having a high recreation value or potential for future recreation development (e.g., day use sites, campgrounds).

3. To maintain or increase opportunities for recreational use of fisheries and wildlife resources.

4. To encourage a coordinated effort among agencies providing recreation programs.

5. To maintain public access to public land along watercourses (e.g., Red Willow and Beaverlodge rivers).

Guidelines

1. For public recreation developments, the highest priority will continue to be given to the provision of extensive recreation activities which require minimal facility development and that are compatible with the area's environmental quality.

2. Trumpeter swan and other waterfowl lakes [shown as TS (trumpeter swan) and OW (other waterfowl) lakes on enclosed Figure 3] have potential for future recreation use. The protection of this potential recreation resource will be adequately ensured by application of the Wildlife Guidelines in this plan.

3. Public access will be maintained to and along rivers and streams.

4. Recreation development will occur where compatible with other values and multiple uses, particularly in regard to trumpeter swan habitat.

5. The local government, nonprofit and community organizations will be encouraged to participate in providing recreation opportunities.

6. Any recreational development will take fire control into consideration at the planning stage to minimize future fire control concerns.

## 2.9 Minerals

Petroleum and Natural Gas - The Deep Basin natural gas area of northwest Alberta-northeast B.C. encompasses several natural gas fields of which portions of the Elmworth, Knopcik, Sinclair, Valhalla and Wapiti are within the planning area. Most of the planning area's petroleum and natural gas rights are under disposition to industry. Many of the approximately 80 wells drilled in the area are producing natural gas, while a few are producing petroleum. If natural gas prices increase in the long term, intensive development can be anticipated, with industry potentially requiring a significant amount of land in the future for wellsites, roadways and pipelines. Several gas processing plants are located near the eastern edge of the planning area.

The oil and gas industry's land requirements for resource development can significantly affect other land use activities within the planning area. It can have a positive effect on grazing by providing improved grazing opportunities along roadways and pipeline rights-of-way and wellsites. It can have a negative effect on timber production by reducing the land base.

Aggregate - Gravel deposits are scarce in the Grande Prairie region; there is a need to protect and manage this resource. There are six gravel leases and a gravel reservation within the planning area.

Objectives

1. To provide opportunities for industry to explore, develop or produce proven mineral resources.

2. To provide opportunities for the orderly exploration and development of mineral resources in previously unexplored areas and formations.

3. To provide for the orderly exploration and development of sand and gravel in a manner compatible with environmental considerations.

Guidelines

1. All resource-related developments must plan for the avoidance and mitigation of impacts on the watershed, agricultural, recreational, aesthetic, wildlife and fisheries values. Surface materials and mineral development projects will follow the existing approval processes.

2. Buffers and timing restrictions may be applied to mineral resource exploration and development activity around lakes used for trumpeter swan nesting (marked TS on enclosed Figure 3). See Guideline 3 in Section 2.5.

3. The development of surface materials can have implications on the operations of the surface disposition holder. Timing restrictions may be required in some cases to mitigate or lessen surface disturbance.

## 2.10 Historical Resources

Historic Period - At present, there are no known fur trade sites or recorded historical structures within the planning area. The area, however, bordered on early agricultural settlements that first appeared around 1910. It is likely, therefore, that structures associated with early rural homesteads could be located within the planning area.

Archaeological - At present, there are no known archaeological sites within the planning area. This is because little field research has occurred in this region. It is suspected, based upon other study areas and regional databases, that lakeshore environments within this area would have been used by prehistoric people. Lakes such as Sinclair, Horse, Preston and Kamisak, for example, are considered to have potential for the discovery of prehistoric sites.

Although there are no precise locational data at this time, there are three private collections of prehistoric artifacts from the Hythe and Yoke Lake areas. The artifacts in these collections are representative of the 9000 years that Alberta Culture and Multiculturalism has estimated man to have inhabited this part of Alberta. Lakeshore and riverine environments within the planning area, as well as the somewhat elevated western portion of those areas around Beavertail, Graham and Barr creeks, are all considered to have potential for the discovery of historical resource sites.

Palaeontological - At present, there are no known palaeontological localities in the planning area. The only area considered to have potential for the discovery of palaeontological resources is along the Red Willow River. This river is large enough that exposures of bedrock may be encountered along its bank, and it flows through an area that is underlain by beds of the Wapiti Formation, which bear dinosaur fossils. Alberta Culture and Multiculturalism's Royal Tyrrell Museum of Palaeontology would therefore be interested in reviewing any referrals for development affecting the banks of this river.

Objectives

1. To protect and/or preserve historical resources (archaeological, palaeontological, historical and natural), as defined in the Historical Resources Act, from potential or actual impact related to future resource developments.

2. To manage historical resource sites for scientific, educational and interpretive purposes.

Guidelines

1. Resource uses in the planning area involving surface disturbance may require historical resources impact assessments before development occurs, as outlined under Section 33 (2) of the Historical Resources Act.

2. The Archaeological Survey of Alberta will participate in the land use referral process to review proposed development projects within those parts of the planning area considered to have high potential for historical resources.

3. To facilitate this referral process, Alberta Culture and Multiculturalism will develop a historical resources sensitivity map for the planning area. This map will outline areas, featuring historical resources potential, for which Alberta Culture and Multiculturalism will request referral of proposed development projects. The map will be distributed to other government agencies involved in land management for reference during the internal referral process.

## 2.11 Access

Highway 2 provides for the transport of goods and services across the Alberta/British Columbia border. Secondary Highway 671 (locally known as the Goodfare Road) and Monkman Pass Road (a local road) both provide access to the provincial border. Access roads have also been established in association with the oil and gas industry. They are not recognized as providing legal access. The potential for additional industrial roadways is significant.

The Canadian National Railway follows Highway 2.

Some recreation OHV use and snowmobiling also occur here. OHVs are used primarily in association with hunting, fishing and general recreation.

Increased access associated with resource development (e.g., gas development, logging, cattle operations) can negatively affect the wildlife resource by creating the opportunity for increased hunting pressure and poaching, thereby decreasing wildlife population numbers. However, increased access can provide people with an opportunity for more wildlife viewing. The cumulative negative effects on the wildlife resource and the cattle operations from access development may require access management.

In response to the grazing and municipal interests, the plan recommends that some consideration be given to having the big game hunting season follow the grazing season.

Objectives

1. To coordinate the development of access and rights-of-way in order to minimize adverse effects on other resources, and to minimize cost and duplication of effort.

2. To meet the required safety standards and free-flow design of the primary highway system by limiting the number of roadway intersections onto the highway in accordance with the statutes administered by the Minister of Transportation and Utilities.

3. To develop an access management plan in consideration of all the resource users (e.g., wildlife, agricultural, mineral, logging and recreation user interests).

4. To have the big game hunting season follow the grazing season, recognizing both users' interests.

Guidelines

1. Resource users will be encouraged to use common access corridors to

minimize environmental impacts and duplication of effort and expense for new roadways.

2. Planning for motorized access must consider all resource users as well as wildfire management.

3. All resource-related access must plan for the mitigation of impacts on watershed, agricultural, recreational, aesthetic, wildlife and fisheries values.

4. Consideration will be given to having the big game hunting season follow the grazing season (i.e., October 15 is the recommended starting date for the big game hunting season).

5. The identification of agriculturally capable public land suitable for sale will take into consideration a full road-allowance grid pattern.

# 3.0 RESOURCE MANAGEMENT AREAS

The Grande Prairie County West planning area was divided into three smaller resource management areas (RMAs) to facilitate the geographic location of resource management objectives (Figure 2). The RMAs are as follows:

1. White Area
2. Community Woodlot
3. Green Area

The balance of this report discusses the three RMAs. Each RMA is identified by:

- a general description of the RMA;
- a specific management intent;
- a brief description of each resource sector; and
- specific resource management objectives and guidelines by resource sectors.

## 3.1 White Area Resource Management Area

The White Area RMA is an area of approximately 448 $km^2$ (173 sq. mi.). Generally, it lies along the eastern planning area boundary, adjacent the agricultural community (Figure 2). The major water bodies in the area include Whitham and Sinclair lakes and a portion of Preston Lake. The major watercourses include portions of Albright and Steeprock creeks. The RMA represents mainly the Boreal Mixedwood Ecoregion. On well-drained sites, the forest cover consists of aspen-dominated communities with some white spruce. Wetland areas support a mixture of black spruce, sedge or willow-dwarf birch communities. Moderately well drained Orthic and Solonetzic Gray Luvisols are the dominant soils on well-drained sites, although poorly drained Greysols and Mesisols occur in depressions and in association with drainage. Generally, these soils compare to Canada Land Inventory (CLI) soil classes 4 to 6 based on capability for wheat production. The capacity for forage production improvements generally ranges from low to high.

Generally, CLI Soils Class 4 rates soils as having severe limitations that restrict the range of crops or require special conservation practices, or both. CLI Soils Class 5 rates soils as having very severe limitations that restrict their capability to produce perennial forage crops, but improvement practices are feasible. CLI Soils Class 6 rates soils as capable of producing only perennial forage crops, and improvement practices are not feasible. (Refer to the Glossary for further information on CLI classes).

The topography varies from very gently to moderately undulating and rolling landscape.

Multiple use management interests on public lands within the White Area RMA include fish, wildlife, recreation, timber and minerals, as well as soil and water conservation. Because of these multiple use interests, some public lands will remain in public ownership.

**Management Intent**

> To provide opportunities for range improvement, forage production and till cropping, while recognizing the importance of other multiple use values such as timber, wildlife and watershed.

**Agriculture and Range**

A total of 79 agricultural dispositions occur within the White Area RMA. More specifically, 46 grazing leases, 16 farm development leases, 7 farm development sales and 10 grazing permits have been issued here. Some private land is also present within the RMA. This plan does not apply to private land.

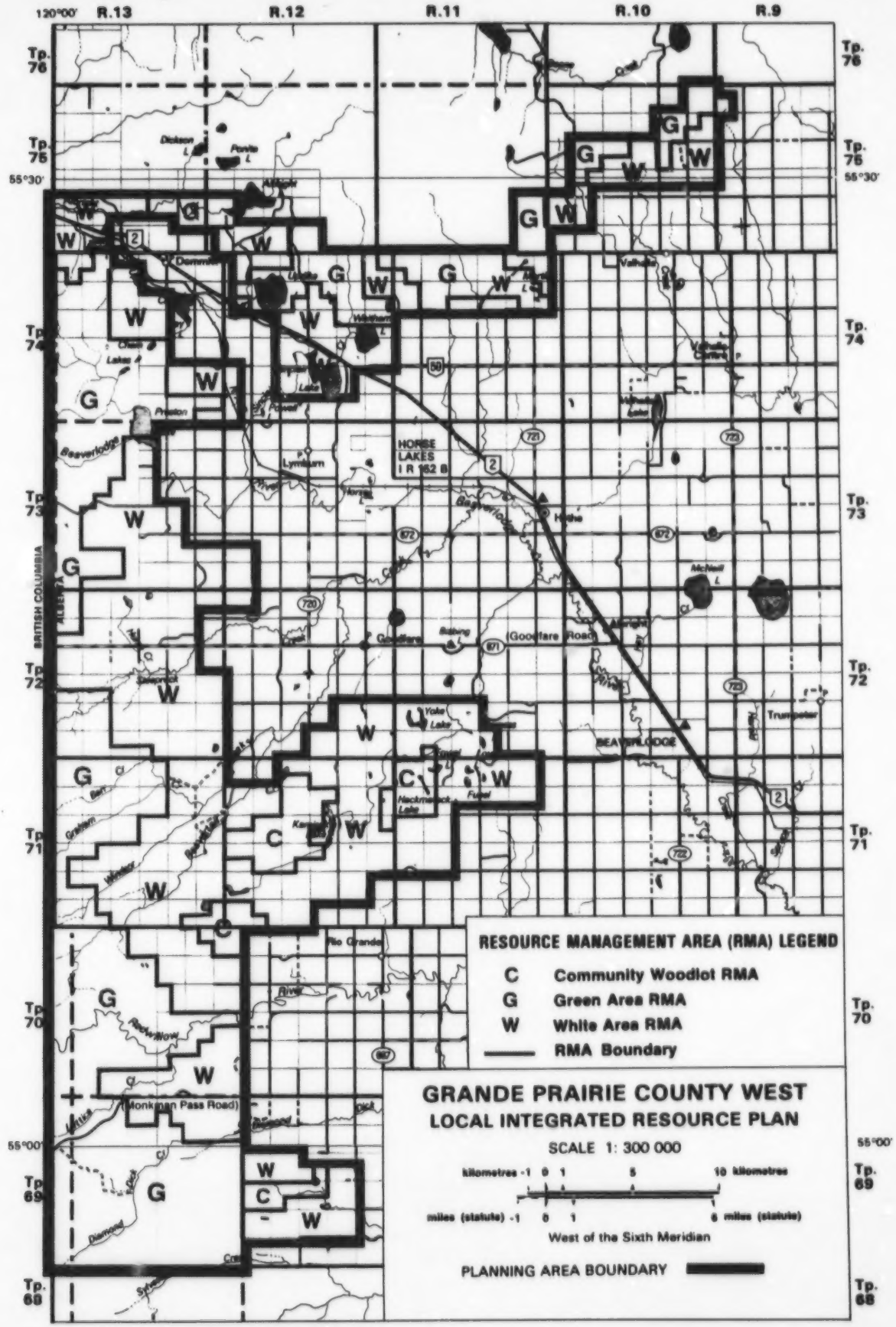


**Figure 2: Resource Management Areas.**

The opportunities for agricultural land use are better here since this RMA borders and includes farming operations, with the long-term emphasis on agricultural development. Although forage and livestock production will continue to be dominant in this RMA, other multiple use interests will be recognized, where appropriate.

Agricultural uses may be restricted over the short term, pending merchantable timber liquidation. However, the land can be made available immediately by adding the merchantable timber values to the land price.

Objectives

1. To make public lands, which have a capability for agricultural production, available for sale or lease.

2. To provide for improved grazing where demand and capability exists, and in consideration of other multiple use needs.

3. To minimize the detrimental impact of agricultural development on environmentally sensitive lands.

Guidelines

1. Suitable public land will be made available for agricultural disposition.

2. Environmentally sensitive lands will remain in public ownership. Agricultural dispositions will be considered only on those portions of land suitable for agricultural uses. Appropriate reservations will be placed on the remaining land that is environmentally sensitive.

3. The necessary infrastructure services (e.g., roads, legal land surveys) will be provided before the sale of public land. This will be done in consultation with the local municipality.

4. Range improvement on public lands will be approved through assistance programs in place at the time of application.

**Timber**

The White Area RMA contains a large volume of deciduous timber and a lesser volume of coniferous timber. Although the highest priority in the White Area is on agricultural use, the timber resource can make a significant contribution to the local economy. Developing market interests for timber resources may also encourage landowners to manage their lands as private woodlots to supplement their farm income.

The community can benefit from harvesting timber before agricultural development, and from ongoing timber harvesting on lands, managed for sustained yield timber production, that are not required for range improvement or agricultural expansion.

Harvesting deciduous timber within grazing dispositions may result in a significant short-term increase in forage production.

Objectives

1. To provide a supply of deciduous and coniferous timber for use or resale by local residents.

2. To ensure salvage and use of merchantable timber resources on public lands required for agricultural or industrial development, where a market exists.

Guidelines

1. Merchantable deciduous and coniferous timber will be harvested or salvaged in accordance with established policy.

2. While the primary priority in the White Area RMA will be agricultural use, it is recognized that some lands containing coniferous and deciduous timber will not be sold or developed for agricultural use because of lack of access or environmental considerations. Areas from which deciduous timber is harvested will be allowed to regenerate and will provide a sustained supply of wood fibre. Coniferous timber stands will not be reforested but will be allowed to regenerate naturally to coniferous or deciduous species.

3. Appropriate conditions will be applied to all resource developments to ensure protection from wildfire.

**Wildlife**

Public land in the White Area RMA will be managed for multiple use. These lands provide habitat for upland and migratory birds, moose, deer, elk and furbearers. Wildlife populations in this RMA will depend on the amount and distribution of habitat maintained on public and private land as well as other factors. This public land is important in providing opportunities for viewing, hunting and trapping.

Changes in land use will alter the wildlife species composition (e.g., from moose to deer), both in numbers and types of species and population densities.

Objectives

1. To maintain a mosaic of cover types to provide habitat for local wildlife populations.

2. To maintain or enhance wildlife habitat on land retained in public ownership, protecting important wildlife habitat features.

Guidelines

1. Important wildlife habitat will be kept in public ownership and reserved under protective notation.

2. Dispositions will continue to be issued to Ducks Unlimited on wetlands important for waterfowl habitat management.

3. Wildlife concerns will be incorporated into range improvement plans and timber harvesting plans on a site-specific basis. Clearing for range improvement is not always compatible with wildlife concerns.

**Fisheries**

The broad fisheries resource description applies.

Objective

1. To protect significant wetlands from degradation by conflicting resource uses.

Guidelines

1. Intensive agricultural development should be considered only where drainage of significant wetlands is not required. Not allowing drainage will minimize the detrimental impact on the water quality and the flow regime.

2. Buffers of approximately 100 m are to be managed for all dispositions along fish-bearing watercourses or major tributaries. This will be determined on a site-specific basis.

3. On new or reposted grazing dispositions, a fenced streambank buffer may be required to protect fisheries habitat. On existing dispositions where site-specific

concerns are identified, solutions will be negotiated with the lessee.

4. The drainage of riparian habitat for agricultural or other resource development will not be permitted.

**Water and Watershed**

The broad water and watershed management objectives and guidelines apply.

**Recreation**

There are three recreation leases and a roadside campground within this RMA (See enclosed Figure 3). The Windsor Creek Heritage Society has a lease near Barr Creek. The Inner Peace Pentecostal Camp Association and the County of Grande Prairie both hold leases on the east shore of Sinclair Lake. The Demmitt campground is operated by Alberta Transportation and Utilities. In the long term, this proposed campground is intended to serve as a rest/overnight stop for highway travellers.

Objectives

1. To maintain the recreation capability of areas identified as having a high recreation value or potential for future recreational development (e.g., campground).

2. To provide for an extensive range of recreation activities such as hunting, fishing, wildlife viewing, OHV use and snowmobiling.

Guidelines

1. The local governments, as well as nonprofit and community organizations, will be encouraged to play the lead role in providing recreation developments.

2. Protection will be ensured for those areas identified as having potential for future recreation use.

**Minerals**

The broad minerals management objectives and guidelines apply.

**Historical Resources**

The broad historical resource management objectives and guidelines apply.

**Access**

The broad access management objectives and guidelines apply.

## 3.2 Community Woodlot Resource Management Area

The Community Woodlot RMA is an area of approximately 45 $km^2$ (17 sq. mi.) within the White Area. Most of the RMA is located in the east-central part of the planning area with a portion near the southeast planning area boundary (Figure 2).

Numerous unnamed water bodies are located in this RMA. Also included are Hackmatack Lake and portions of Fowell and Kamisak lakes. Generally, aspen is the dominant vegetation cover on well-drained sites. The area along the southeast boundary of the planning area supports a mixedwood community with aspen, white spruce and lodgepole pine being the dominant overstory species. The area encompassed by the community woodlots has little mature coniferous s timber but does contain over 1215 ha (3000 ac.) of young white spruce. Black spruce with lesser occurrences of willow shrubland and sedge meadows, is associated with the wetlands.

Representative soils on well-drained sites include moderately well to imperfectly drained Orthic, Brunisolic and Gleyed Gray Luvisols. The poorly drained sites include Mesisols. This RMA has localized areas where the excessive stone content limits agricultural

use. The topography varies from gently to moderately undulating.

**Management Intent**

To provide for a range of multiple uses, with an emphasis on sustained-yield timber management, improved and unimproved grazing, while recognizing the importance of other values such as watershed, fisheries and wildlife.

**Agriculture and Range**

A significant amount of this area is held under 13 grazing dispositions. This RMA's land's capability for till cropping is limited by marginal soils, frost hazard and stoniness. However, some of this area is suitable for improved and unimproved grazing.

Objective

1. To provide for unimproved and improved grazing where compatible with other multiple use needs.

Guidelines

1. Range improvement may be permitted where not in conflict with coniferous timber production, (see Timber Guideline 4) or fish and wildlife resource values.

2. Public land in the Community Woodlot RMA will remain in public ownership.

3. Applications for grazing dispositions will be assessed to determine whether there is sufficient forage or potential for range improvement.

**Timber**

The Community Woodlot RMA contains areas of high-value timber, which are to be managed for the benefit and use of local residents. This RMA has the capability to provide significant volumes of coniferous and deciduous timber. Most of the coniferous growing stock consists of young spruce regeneration under aspen stands. In the long term, this will provide a significant volume of coniferous timber for local residents. The majority of the land base in the Community Woodlot RMA will remain in forest cover and will provide a sustained supply of timber for local residents.

Objectives

1. To provide a sustained yield of coniferous and deciduous timber for harvest by local residents.

2. To ensure use of merchantable timber in coordination with other clearing activities (e.g., range improvement, oil and gas development), where a market exists.

3. To expand use of the deciduous and coniferous resources.

Guidelines

1. Coniferous and deciduous timber will be managed to provide for harvest by local residents.

2. The timber in this RMA will be managed in conjunction with the timber in the Green Area RMA on a sustained-yield basis.

3. Harvested coniferous and deciduous stands will be reforested in accordance with established reforestation policy and guidelines.

4. Range improvement may not occur in areas that contain either of the following:

   (a) merchantable coniferous timber in volumes greater than 30 $m^3$/ha; and
   (b) coniferous regeneration in densities greater than 250 stems/ha.

   In these areas, coniferous regeneration and timber will be mapped to assist in the development of range management and improvement plans in the affected leases.

5. It is recognized that not all deciduous stands will be cleared for range improvement. Stands that are not cleared will be managed on a sustained-yield basis. Aspen in mixedwood stands will also be managed on a sustained-yield basis.

6. Modification of grazing practices may be required to ensure successful reforestation of coniferous stands following harvest. These modifications will be determined in consultation with the grazing lessees when establishing detailed operational plans.

7. The feasibility of increasing forage production through harvesting deciduous timber will be determined.

**Wildlife**

The broad wildlife resource description applies.

Objectives

1. To ensure a mosaic of cover types in order to maintain or increase wildlife populations.

2. To maintain and enhance wildlife habitat on public lands by protecting important wildlife features.

Guideline

1. Wildlife habitat protection will be provided through the Fish and Wildlife Division's input into range improvement plans, logging plans, industrial dispositions and other disposition applications on a site-specific basis.

**Fisheries**

There is a limited opportunity for the fisheries resource in the Community Woodlot RMA.

The broad fisheries management objectives and guidelines apply.

**Water and Watershed**

The broad water and watershed management objectives and guidelines apply.

**Recreation**

The broad recreation management objectives and guidelines apply.

**Minerals**

The broad minerals management objectives and guidelines apply.

**Historical Resources**

The broad historical resource management objectives and guidelines apply.

**Access**

The broad access management objectives and guidelines apply.

## 3.3 Green Area Resource Management Area

The Green Area RMA is an area of approximately 355 km² (137 sq. mi.).

Generally, it lies along the planning area's northern and western boundaries. Its western border is the Alberta/British Columbia provincial boundary (Figure 2). Most of the Red Willow River is within this RMA. A portion of Steeprock Creek is also included. Preston Lake, most of which is within this area, represents the major water body. Several other unnamed lakes are also included. Most of the RMA represents the Boreal Mixedwood Ecoregion, with aspen-dominated communities. The land south of the Monkman Pass Road represents the Boreal Foothills Ecoregion, with lodgepole pine and aspen communities. Wetland areas support a mixture of black spruce, sedge or willow-dwarf birch communities. Most of the RMA's dominant soils are moderately well drained Orthic and Solonetzic Gray Luvisols. Soils south of the Monkman Pass Road are generally well drained Orthic and Brunisolic Gray Luvisols. Poorly drained Gleyed Luvisols and Gleysols occur in lowlands. The topography of the landscape varies from very gently to moderately undulating and rolling.

**Management Intent**

> To provide for a range of activities, with an emphasis on sustained-yield timber production for use by local residents and small-scale local timber operators, yet recognizing other values and commitments (e.g., grazing dispositions, trapping).

**Agriculture and Range**

Twelve grazing dispositions have been issued in this area. Some of these dispositions have long-term, approved plans for range improvement. Much of the area has a low, unimproved grazing capability. Range improvement has occurred on several dispositions. Very little of the land designated as Green Area would be suitable for continuous till cropping.

Objectives

1. To provide for unimproved grazing and a limited amount of improved grazing where the potential exists and where grazing is compatible with other resource uses.

2. To use temporarily available forage resulting from deciduous harvesting, depending on local demand and compatibility with other multiple use needs.

3. To recognize the existing grazing dispositions and their approved long-term range improvement plans.

4. To allow opportunities for the establishment of domestic forage to follow deciduous harvesting, providing it does not reduce the capability of the deciduous forest to support a sustained yield.

Guidelines

1. Public Lands Division will continue to manage and administer the grazing dispositions within the Green Area RMA. The Public Lands Division will also continue to be the management contact agency with the grazing lessees.

2. For grazing leases/permits located within both Green Area and White Area RMAs, the first priority for range improvement will be on the White Area portion of the disposition where not in conflict with fish and wildlife values.

   Where it is determined through range management planning that it would be

more logical to develop lands within the Green Area (e.g., better soil conditions/more efficient cattle distribution), this may occur. All of the planning for range improvement will be done in consultation with the lessees.

Wherever possible, range improvement will be directed to non-stocked coniferous and deciduous forest lands in order to minimize the loss of forest land base. It is recognized that this will not always be possible and some loss of productive timber land base may occur. All range improvement plans in the Green Area RMA that were approved before 1989 will also be recognized and be permitted to proceed.

3. The existing approved, long-term range improvement plans for grazing leases and permits entirely within the Green Area RMA are recognized and will be permitted to proceed. Where long-term range management plans do not exist, range improvement may occur, but where possible it should occur in areas not required for sustained-yield timber management.

4. The carrying capacity of existing dispositions may be increased in the short term through harvesting deciduous timber, which could be done as the market develops for this resource. The feasibility of increasing forage production through deciduous timber harvesting will be done in consultation with the grazing lessees.

5. New grazing dispositions within the Green Area RMA may be granted where the unimproved grazing potential justifies issuance of a disposition. In general, grazing dispositions will not be issued where range improvement would be required to make the disposition viable.

6. New agricultural dispositions (e.g., grazing) will not be permitted along the Red Willow River valley breaks. Should those leased lands along the valley breaks or around important waterfowl habitat become vacant, they will not be made available for agricultural disposition.

**Timber**

The Green Area RMA has the capability to provide a large volume of coniferous and deciduous timber for harvest by local residents and timber operators. Although only a limited deciduous timber market has developed up to 1991, the potential for a market to develop in the future is good. Establishing a local timber industry would help diversify the local economy.

The lands within the Green Area RMA have high timber and wildlife values, a low agricultural value for till cropping, and a high potential for range improvement in some areas.

Objectives

1. To provide a sustained yield of coniferous and deciduous timber for local use and sale.

2. To improve the productivity of the forest land base, where feasible, through intensive forest management.

3. To provide for other land uses that are compatible with sustained-yield timber management.

4. To expand the use of the coniferous and the deciduous timber resource.

Guidelines

1. All harvested stands will be reforested in accordance with established reforestation policy and regulations. In prescribing reforestation methods, other resource uses (e.g., livestock

operations, wildlife habitat) will be taken into account with an objective of mitigating adverse impacts on these uses.

2. Previously harvested coniferous stands will be assessed to determine the following:

   (a) whether they are adequately reforested; and
   (b) whether it is feasible to reforest inadequately stocked areas.

3. Coniferous and deciduous timber will be managed by the Alberta Forest Service for harvest by local residents and small local industries owned by local residents as markets develop. Coniferous and deciduous timber will be allocated on an annual basis through small timber permits. Long-term harvesting rights will not be granted. Local residents will have input into the long-term forest management plan, which will establish the residency requirements for persons/local industries to be eligible for permits to harvest timber.

   Consideration will be given to the establishment of a local timber management board, which will be consulted in the preparation of the short-term harvesting plans on an ongoing basis.

   The coniferous and deciduous harvest will be managed on a five-year, cut control period. If after a five-year period a significant "undercut" has accumulated, this may be made available to local residents and small local industries through timber permits. If local residents/industries are unable to use the "undercut", the timber permits may be made available to other individuals or companies resident to Alberta. This will ensure the full annual allowable cut is used.

4. Timber harvesting will be conducted under existing Timber Harvest Planning and Operating Ground Rules. Timber harvesting plans will be modified where necessary to protect watershed values, and protect or enhance important wildlife habitat (See enclosed Figure 3). The present agricultural uses and interests will be considered in the development of timber harvesting plans.

5. After the transfer of this land to the Green Area, the coniferous and deciduous annual allowable cuts will be determined. The Green Area RMA will be managed as a separate forest management unit.

6. Salvage logging may be required after fire or infestation by insects or disease, or in advance of land clearing associated with industrial development or range improvement.

**Wildlife**

This RMA provides good upland wildlife habitat. The vegetation cover is quite diverse, primarily because of glacial features that favour increased species diversity and density. During inventory, the highest ungulate densities were found along the western portion of the planning area. This is probably a result of the combination of limited access, fewer developments and diverse habitat.

The Green Area RMA currently provides very good habitat for moose, deer, elk and furbearers. The regeneration of aspen following harvest may, in some cases, provide benefits for wildlife habitat enhancement.

Objectives

The broad wildlife management objectives apply.

Guideline

1. New grazing or other agricultural dispositions will not be permitted along the Red Willow River valley breaks. Should those leased lands within the valley breaks become vacant, they will not be reposted.

**Fisheries**

The Red Willow and Beaverlodge river systems provide important spawning and rearing habitat for arctic grayling, northern pike, walleye and bull trout, as well as non-game species.

The broad fisheries management objectives and guidelines apply.

**Water and Watershed**

The broad water and watershed management objectives and guidelines apply.

**Recreation**

Generally, the area is used primarily for extensive recreation activities such as hunting, fishing, wildlife viewing, OHV use and snowmobiling.

The three recreation dispositions or reservations within this RMA are held by the Department of Forestry, Lands and Wildlife. Two represent candidate natural areas, while the third represents a group campground (16 ha or 40 ac.) for Junior Forest Wardens (Figure 3).

The Demmitt candidate recreation natural area (65 ha or 160 ac.) is located on the shore of Updike Lake. The terrain varies from flat to gently sloping. The vegetation cover varies from an upland aspen forest (50%) to low-lying black spruce/willow fen (15%) and a willow-sedge marsh (20%), with the rest of the area (15%) being open water. Overall, the site supports a good diversity of wildlife habitat including important trumpeter swan habitat. Potential site uses are hunting, bird watching and other nature-related activities.

The Red Willow Falls candidate conservation natural area (34 ha or 84 ac.) is located along the Red Willow River. The site's features include 3 m to 4 m-high falls on the Red Willow River and a beaver-dammed oxbow lake. The site supports mixedwood and deciduous stands. This scenic setting is locally known for camping, picnicking and swimming, but there is no developed access.

Under the Volunteer Stewardship Program, individuals or organizations can assist in effectively protecting and managing natural areas. Local interest has been expressed to assist in the management of the Red Willow Falls site.

Objectives

1. To provide a range of extensive recreation activities such as hunting, fishing, wildlife viewing, OHV use and snowmobiling.

2. To protect areas having potential for future development of intensive recreation facilities (e.g., day-use sites, group campgrounds).

3. To maintain the recreational capability of areas identified as having a high recreation value, or potential for future recreation development or use (i.e, Red Willow Falls and Demmitt candidate natural areas).

Guidelines

1. A protective notation will act as a holding mechanism for the Red Willow Falls and the Demmitt sites until the type of further protection, such as a natural area designation, is approved and established.

2. Those areas having a high recreation value will be protected from incompatible activities or development.

3. The local governments, organizations or individuals can play a role in providing recreation opportunities.

**Minerals**

The broad minerals management objectives and guidelines apply.

**Historical Resources**

The broad historical resources management objectives and guidelines apply.

# 4.0 PLAN IMPLEMENTATION, MONITORING AND AMENDMENT

General administrative procedures and mechanisms required for plan implementation, monitoring and amendment are outlined in this chapter.

## 4.1 General Implementation

The Grande Prairie County West Local Integrated Resource Plan will be implemented within the terms of appropriate legislation, regular programs and activities of the government, operational plans, specific development projects and referral processes. The zoning provides a means of processing applications for new public lands dispositions within the planning area. Existing systems for referral and interdepartmental review will apply to the plan. Resources will continue to be administered by the departments responsible, in line with the approved zoning, resource management objectives, guidelines and, any operational plans.

Government management agencies participating in the Grande Prairie County West Local IRP have several responsibilities to ensure effective delivery of this plan. It is their responsibility to deal with conflicts or concerns with respect to implementation or interpretation of any of the plan's provisions. These responsibilities are outlined by subject area below.

Referral Systems: Participating government resource management agencies will ensure that existing referral systems of the Alberta government are adequate to encompass all affected or concerned agencies.

Plan Monitoring: The Grande Prairie County West Local IRP will be reviewed annually by the Peace River Regional Resource Management Committee to:

a) assess the relevancy of the stated resource objectives in light of changing conditions;

b) assess the resource management guidelines and referral procedures;

c) assess agency operational plans to ensure their consistency with the intents, objectives and guidelines contained in the plan; and

d) recommend amendments to the Grande Prairie County West Local IRP and future actions required to maintain or promote government resource management activities in the planning area.

An annual report will be prepared by the Peace River Regional Resource Management Committee. The report will highlight the previous year's activities in the planning area. It will also indicate what might be expected to be accomplished in the planning area during the next year. This report will be available to the public upon request. The report may be deferred if there is a lack of activity or progress on government resource management objectives within the planning area.

On a periodic basis (approximately every five years), an overall assessment of the plan will be conducted by the Peace River Regional Resource Management Committee. If the plan is found to be no longer current, a major plan review will occur.

For example, a major plan review would occur when the plan is considered out-of-date due to significant resource changes or new priorities. This review would include:

a) a comprehensive review of all aspects of the plan including, but not limited to, resource management objectives and guidelines, and land-use zoning;

b) a public review similar to the public review involved in the development of new integrated resource plans; and

c) a statement recommending amendments to the plan and future actions required to maintain or promote government resource management activities in the planning area.

## 4.2 Amendment Procedures

Changes to the planning area boundary, land-use zoning, broad planning area resource management objectives, and guidelines that would result in significant changes to the allowed resource uses or priorities will require major amendments to the plan. An amendment to the plan may be required as a result of an annual review, government requests or a request from an individual, group or organization outside the government.

Proposed amendments to the Grande Prairie County West Local IRP from outside the government should be made by formal application to the Assistant Deputy Minister of the Public Lands Division, Alberta Forestry, Lands and Wildlife*. Opportunities for public review of significant amendments to the Grande Prairie County West plan will be provided before changes are approved by the government.

The decision to consider requests to amend an integrated resource plan rests with the Minister of Forestry, Lands and Wildlife or his designate. Amendments that entail a major policy decision or a change to the basic intent of the plan will be forwarded to the Minister for his review and approval.

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*Guidelines for preparing requests for amendments to integrated resource plans are available upon request from the Resource Planning Branch of Alberta Forestry, Lands and Wildlife in Edmonton.

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Forests Act, Revised Statutes of Alberta 1980, c. F-16, with amendments in force as of September 12, 1986. Section 7.

Historical Resources Act, Revised Statutes of Alberta, 1980, c. H-8 with amendments in force as of June 5, 1987, Section 33 (2).

Public Lands Act, Public Lands Grazing Lease Regulations, Alberta Regulation 432/66 with amendments up to and including Alberta Regulation 291/87, Section 20(1).

## GLOSSARY

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| **Agricultural Land** | **In this plan, agricultural land includes land suitable for till cropping, grazing (improved or unimproved) or for agricultural production.** |
| **Annual Allowable Cut** | **The total volume of timber that may be harvested in one year based on sustained yield.** |
| **Animal Unit Month (AUM)** | **A measure of forage or feed required to maintain one animal unit (i.e., a mature cow of 455 kg or 1000 lb. with or without an unweaned calf) for a period of 30 days.** |
| Canada Land Inventory (CLI) Class 4 | Soils in this class have severe limitations that restrict the Soils range of crops or require special conservation practices, or both. The limitations seriously affect one or more of the following practices: timing and ease of tillage, planting and harvesting, choice of crops and methods of conservation. The soils are low to fair in productivity for a moderate range of crops but may have high productivity for a specially adapted crop. |
| Canada Land Inventory (CLI) Class 5 | Soils in this class have very severe limitations that Soils restrict their capability to produce perennial forage crops; however, improvement practices are feasible. The limitations are so severe that the soils cannot be used for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants, and may be improved by use of farm machinery. The improvement practices may include clearing brush, cultivation, seeding, fertilizing or water control. |
| Canada Land Inventory (CLI) Class 6 | Soils in this class are capable of producing only perennial Soils forage crops, and improvement practices are not feasible. The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical. The terrain may be unsuitable for farm machinery, the soils may not respond to improvement or the grazing season may be very short. |
| Carrying Capacity (Range) | The maximum number of animals that can graze annually on a given range for a specific period of time, without inducing a downward trend in forage production, forage quality or soil quality. |
| Commercial Timber Permit | Authorization for the permittee to harvest timber; this identifies lands on which timber may be harvested, the period of time within which the timber may be harvested, the actual timber to be harvested and the terms and conditions on which the permit is issued (Forests Act, RSA 1980, c. F-16). |

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| Community Woodlot | In this plan, reserves of public land within the White Area administered through the Grande Prairie Forest. These are set aside for the purpose of establishing a continuing supply of forest products for local community needs and are intended to be managed on a sustained-yield basis. Dispositions are limited to small-scale timber permits. |
| Public Land | Lands of the Crown in the right of Alberta. |
| Disposition | Dispositions may be of a permanent nature, as through the sale of land, or temporary, when rights to particular lands or resources, either surface or subsurface, are granted for a finite period of time. The most common forms of disposition are by sale, lease, licence or permit. |
| Ecological Corridor Agreements | Public lands going to title with a caveat on the title to protect against conservation hazards associated with watercourses. Conservation hazards include bank and channel instability, erosion and siltation (pollution), and loss of wildlife and fisheries habitat. The caveat restricts the use and development of an appropriate buffer area along specific watercourses. |
| Endangered Species | Any indigenous species of fauna or flora whose existence in Canada is threatened with immediate extinction through all or a significant portion of its range, owing to the action of man (Committee on the Status of Endangered Wildlife in Canada). |
| Environmentally Sensitive Lands | Represents public land areas with either watershed, wildlife or fisheries concerns. |
| Fire Management | The activities concerned with the protection of people, property and forest areas from wildfire. Also, the use of prescribed burning for the attainment of forest management and other land use objectives, all conducted in a manner that considers environmental, social and economic criteria. |
| Forest Management Plan | A general plan for the management of a forest area, usually for a full rotation cycle, including the objectives, prescribed management activities and standards to be employed to achieve specific goals. It is commonly supported with more detailed operating plans. |
| Forest Management Unit (FMU) | FMUs are managed as separate entities on a sustained-yield basis.<br><br>FMUs are controlled by a management plan that includes information such as growing stock, allowable cuts and a timber harvest development program. FMUs are managed to allow periodic cutting of timber on a sustained-yield basis. |

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| Forest Protection Area | Those lands in the Province of Alberta for which the Alberta Forest Service of the Department of Forestry, Lands and Wildlife is responsible for providing forest protection. These lands are determined by Order-in-Council, under the Forest and Prairie Protection Act, Chapter F-14, Revised Statutes of Alberta, 1980. |
| Green Area | The Green Area, established in 1948 by the Alberta Order-in-Council 213/48, consists basically of the unsettled forest lands and covers 50.9 percent of the total area of the Province of Alberta. Public lands in the Green Area are managed primarily for forest production, watershed protection, fish and wildlife management, recreation and other multiple uses. Permanent settlement, except on legally subdivided lands, as well as agricultural uses other than grazing, have been excluded (Alberta Public Lands. 1988. FLW. Pub. No. I/201. Edmonton). |
| Historic Resource | ". . . any work of nature or of man that is primarily of value for its palaeontological, archaeological, prehistoric, historic, cultural, natural, scientific or aesthetic interest including, but not limited to, a palaeontological, archaeological, prehistoric, historic or natural site, structure or object " as recognized by the Department of Culture and Multiculturalism. |
| Historic Site | ". . . any site which includes or consists of an historical resource of an immovable nature or which cannot be disassociated from its context without destroying some or all of its value as an historical resource and includes a prehistoric, historic or natural site or structure " as recognized by the Department of Culture and Multiculturalism. |
| Historical Resources Impact Assessment | Projects normally initiated in conjunction with development programs that are anticipated to cause ground surface disturbance within the Province of Alberta. The objectives of such projects are to locate all historical resource sites to be affected by the development program, to evaluate the worth of such sites relative to Alberta historical resources as a whole, to determine the nature of the impact of the development program on individual sites, and to propose conservation procedures for those sites to be affected by the development, as recognized by the Department of Culture and Multiculturalism. |
| Important Wildlife Habitat | Habitat areas that are critical to a significant population of a species during at least part of the year. This may mean wintering areas for wild ungulates, dancing grounds for upland game birds, and production (nesting) and staging areas for waterfowl. |

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| Local Timber Permit | A timber permit issued normally to local residents authorizing the cutting of coniferous or deciduous timber for volumes up to a maximum of 750 $m^3$ coniferous or 1500 $m^3$ deciduous, and expiring April 30 of any year. |
| Miscellaneous Timber Use | Timber made available for use by local residents under Local Timber Permits, which are issued without competition. |
| Operating Ground Rules | Standard ground rules employed by the Alberta Forest Service to guide timber harvesting. These are intended to both protect environmental quality and promote the growth of timber. |
| Palaeontological | ". . . a work of nature consisting of or containing evidence of extinct multicellular beings and includes those works or classes of works of nature designated by the regulations as palaeontological resources ", as recognized by the Department of Culture and Multiculturalism. |
| Quota | Coniferous or deciduous timber rights expressed as a percent share of the annual allowable cut for a given FMU. Quotas are used to allocate commercial quantities of timber within specified areas to individual companies, and have a 20-year term. |
| Referral System | The Alberta Government has established formal mechanisms for the internal review of land use applications originating from within the Alberta government and the private sector. Government management agencies concerned about or affected by the provisions within an application participate in its review. Subsequent to the review, each management agency files its recommendation for the approval or rejection of the application. These positions are coordinated by a lead agency (i.e., "one window" approach) which, in turn, provides the proponent with a comprehensive decision. |
| Regional Resource Management Committee (RRMC) | A group of regional directors representing each of the involved divisions of Alberta Forestry, Lands and Wildlife and other agency representatives on an as needed basis. The RRMC reviews planning documents and has the primary responsibility for implementing approved plans. |
| Riparian Habitat | A vegetation zone influenced by groundwater, subirrigation (areas where a high-water table reaches and/or saturates the root zone) or surface water, and which provides important habitat for fish, waterfowl and a majority of wildlife species. This vegetation is often a transition zone between aquatic and terrestrial habitat. |
| Salvage Cutting | The harvest of dead, downed, injured or threatened trees before such timber becomes unmerchantable. |

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| **Sanitation Cutting** | **A cutting made to remove dead, diseased, infested, damaged or susceptible trees to reduce or prevent the spread of insects or pathogens.** |
| **Sustained Yield Timber Management** | **The balancing of timber growth and harvesting production to ensure continued forest productivity at a given level of management without impairing productivity of the land.** |
| **White Area** | **The White Area is the region of the province settled initially, and includes nearly one-third of the total area of Alberta. Available public lands in this region, suitable for settlement and agriculture and not required for other multiple uses such as soil and water conservation, deciduous and coniferous timber production, fisheries and wildlife habitat protection or recreational uses, may be applied for pursuant to the Public Lands Act (RSA 1980, c. P-30).** |
| **Wildfire** | **An unplanned or unwanted natural or man-caused fire.** |

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